A resolution (S. Res. 866) expressing support for the designation of October 2022 as "National Co-Op Month" and commending the cooperative business model and the member-owners, businesses, employees, farmers, ranchers, and practitioners who use the cooperative business model to positively impact the economy and society.

There being no objection, the Senate proceeded to consider the resolution.

Mr. CARDIN. Mr. President, I further ask that the resolution be agreed to, the preamble be agreed to, and the motions to reconsider be considered made and laid upon the table with no intervening action or debate.

The PRESIDING OFFICER. Without objection, it is so ordered.

The resolution (S. Res. 866) was agreed to.

The preamble was agreed to.

(The resolution, with its preamble, is printed in today's RECORD under "Submitted Resolutions.")

RELATING TO THE DEATH OF ALAN R. PARKER, FORMER STAFF DIRECTOR AND CHIEF COUNSEL OF THE COMMITTEE ON INDIAN AFFAIRS OF THE SENATE

Mr. CARDIN. Mr. President, I ask unanimous consent that the Senate proceed to the consideration of S. Res. 867, submitted earlier today.

The PRESIDING OFFICER. The clerk will report the resolution by title.

The senior assistant legislative clerk read as follows:

A resolution (S. Res. 867), relating to the death of the Alan R. Parker, former Staff Director and Chief Counsel of the Committee on Indian Affairs of the Senate.

There being no objection, the Senate proceeded to consider the resolution.

Mr. CARDIN. Mr. President, I ask unanimous consent that the resolution be agreed to, the preamble be agreed to, and the motions to reconsider be considered made and laid upon the table with no intervening action or debate.

The PRESIDING OFFICER. Without objection, it is so ordered.

The resolution (S. Res. 867) was agreed to.

The preamble was agreed to.

(The resolution, with its preamble, is printed in today's RECORD under "Submitted Resolutions.")

EXPRESSING SUPPORT FOR THE DESIGNATION OF SEPTEMBER 2022 AS SICKLE CELL DISEASE AWARENESS MONTH

Mr. CARDIN. Mr. President, I ask unanimous consent that the Senate proceed to the consideration of S. Res. 868, submitted earlier today.

The PRESIDING OFFICER. The clerk will report the resolution by title.

The senior assistant legislative clerk read as follows:

A resolution (S. Res. 868) expressing support for the designation of September 2022 as

"Sickle Cell Disease Awareness Month" in order to educate communities across the United States about sickle cell disease and the need for research, early detection methods, effective treatments, and preventative care programs with respect to complications from sickle cell disease and conditions related to sickle cell disease.

There being no objection, the Senate proceeded to consider the resolution.

Mr. CARDIN. Mr. President, I ask unanimous consent that the resolution be agreed to, the preamble be agreed to, and the motions to reconsider be considered made and laid upon the table with no intervening action or debate.

The PRESIDING OFFICER. Without objection, it is so ordered.

The resolution (S. Res. 868) was agreed to.

The preamble was agreed to.

(The resolution, with its preamble, is printed in today's RECORD under "Submitted Resolutions.")

QUANTUM COMPUTING CYBERSE-CURITY PREPAREDNESS ACT

Mr. CARDIN. Mr. President, I ask unanimous consent that the Committee on Homeland Security and Governmental Affairs be discharged and the Senate now proceed to the immediate consideration of H.R. 7535.

The PRESIDING OFFICER. The clerk will report the bill by title.

The senior assistant legislative clerk read as follows:

A bill (H.R. 7535) to encourage the migration of Federal Government information technology systems to quantum-resistant cryptography, and for other purposes.

There being no objection, the committee was discharged, and the Senate proceeded to consider the bill.

Mr. CARDIN. Mr. President, I ask unanimous consent that the Hassan substitute amendment, which is at desk, be considered and agreed to; the bill, as amended, be considered read a third time and passed; and the motions to reconsider be considered made and laid upon the table.

The PRESIDING OFFICER. Without objection, it is so ordered.

The amendment (No. 6510), in the nature of a substitute, was agreed to, as follows:

(Purpose: In the nature of a substitute)

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the "Quantum Computing Cybersecurity Preparedness Act".

SEC. 2. FINDINGS; SENSE OF CONGRESS.

- (a) FINDINGS.—Congress finds the following:
- (1) Cryptography is essential for the national security of the United States and the functioning of the economy of the United States
- (2) The most widespread encryption protocols today rely on computational limits of classical computers to provide cybersecurity.
- (3) Quantum computers might one day have the ability to push computational boundaries, allowing us to solve problems

that have been intractable thus far, such as integer factorization, which is important for encryption.

- (4) The rapid progress of quantum computing suggests the potential for adversaries of the United States to steal sensitive encrypted data today using classical computers, and wait until sufficiently powerful quantum systems are available to decrypt it.
- (b) SENSE OF CONGRESS.—It is the sense of Congress that—
- (1) a strategy for the migration of information technology of the Federal Government to post-quantum cryptography is needed; and
- (2) the governmentwide and industrywide approach to post-quantum cryptography should prioritize developing applications, hardware intellectual property, and software that can be easily updated to support cryptographic agility.

SEC. 3. DEFINITIONS.

In this Act:

- (1) AGENCY .—The term "agency"-
- (A) means any executive department, military department, Government corporation, Government controlled corporation, or other establishment in the executive branch of the Government (including the Executive Office of the President), or any independent regulatory agency; and
 - (B) does not include-
- (i) the Government Accountability Office;
- (ii) the governments of the District of Columbia and of the territories and possessions of the United States, and their various subdivisions.
- (2) CLASSICAL COMPUTER.—The term "classical computer" means a device that accepts digital data and manipulates the information based on a program or sequence of instructions for how data is to be processed and encodes information in binary bits that can either be 0s or 1s.
- (3) DIRECTOR OF CISA.—The term "Director of CISA" means the Director of the Cybersecurity and Infrastructure Security Agency.
- (4) DIRECTOR OF NIST.—The term "Director of NIST" means the Director of the National Institute of Standards and Technology.
- (5) DIRECTOR OF OMB.—The term "Director of OMB" means the Director of the Office of Management and Budget.
- (6) Information technology.—The term "information technology" has the meaning given the term in section 3502 of title 44, United States Code.
- (7) NATIONAL SECURITY SYSTEM.—The term "national security system" has the meaning given the term in section 3552 of title 44, United States Code.
- (8) POST-QUANTUM CRYPTOGRAPHY.—The term "post-quantum cryptography" means those cryptographic algorithms or methods that are assessed not to be specifically vulnerable to attack by either a quantum computer or classical computer.
- (9) QUANTUM COMPUTER.—The term "quantum computer" means a computer that uses the collective properties of quantum states, such as superposition, interference, and entanglement, to perform calculations.

SEC. 4. INVENTORY OF CRYPTOGRAPHIC SYSTEMS; MIGRATION TO POST-QUANTUM CRYPTOGRAPHY.

(a) INVENTORY.—

(1) ESTABLISHMENT.—Not later than 180 days after the date of enactment of this Act, the Director of OMB, in coordination with the National Cyber Director and in consultation with the Director of CISA, shall issue guidance on the migration of information technology to post-quantum cryptography, which shall include at a minimum—

(A) a requirement for each agency to establish and maintain a current inventory of information technology in use by the agency